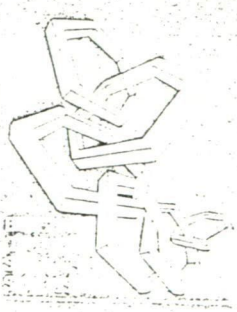
4TH BELGIAN ORGANIC SYNTHESIS SYMPOSIUM

LEUVEN 25-29 MAY 1992

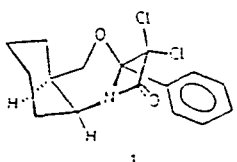


SYNTHESIS AND STRUCTURE OF SATURATED AZETO[1,2-a][3,1] AND [2,1-b][1,3]BENZOXAZINES

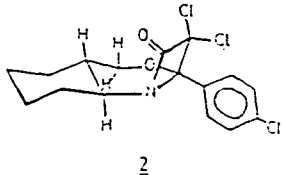
Géza Stájer, Angela E. Szabó, Ferenc Fülöp, Gábor Bernáth, [a] Pál Sohár

Institute of Pharmaceutical Chemistry, Albert Szent-Györgyi Medical University, Szeged, Hungary; [a]Spectroscopic Laboratory, Department of General and Inorganic Chemistry, Eötvös Loránd University, Budapest, Hungary

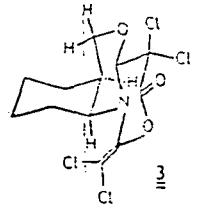
Saturated cis and trans 3,1- and 1,3-benzoxazines with chloroacetyl chlorides yielded azeto[1,2-a][3,1] and [2,1-b][1,3] benzoxazines. In one case the addition takes place by a partial cis → trans inversion of the starting compound. Besides the stereoisomeric azetidinones 1 and 2, the adduct 3, containing two condensed 1,3-oxazine rings, was also isolated.



1



2



3

In each other case, only one compounds could be isolated.

The stereostructures of the new compounds were proved by ^{1}H and ^{13}C nmr spectroscopy with the use of NOE measurement data. The reaction mechanism will also be discussed.